CLAIMS

1. A process for the secured distribution of video sequences according to a digital stream format stemming from an encoding based on a processing by wavelets, constituted by frames comprising blocks containing coefficients of wavelets describing the visual elements, characterized in that an analysis of the stream is made prior to the transmission to the client equipment in order to generate a modified main stream by deletion and replacement of certain information coding the original stream and presenting the format of the original stream, and complementary information of any format comprising this digital information coding the original stream and suitable for permitting the reconstruction of these modified frames, then this modified main stream and this complementary information generated in this manner are transmitted separately from the server to the addressed equipment.

2. The process for the secured distribution of video sequences according to Claim 1, characterized in that the scrambling is brought about by modifying coefficients of wavelets belonging to at least one temporal subband resulting from the temporal analysis.

3. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the scrambling is carried out by modifying the wavelet coefficients belonging to at least one spatial subband resulting from the spatial analysis of a temporal subband.

4. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the scrambling is brought about by modifying coefficients of wavelets belonging to at least one temporal subband resulting from the temporal analysis of one spatial subband.

5. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the wavelet coefficients to be modified are selected according to laws that are random and/or defined a priori [beforehand].

6. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the parameters for the scrambling are a function of the properties of temporal scalability and/or of spatial scalability and/or of qualitative scalability and/or temporal scalability [sic], of transmission rate scalability and/or of scalability by regions of interest offered by the digital streams generated by the wavelet-based coders.

7. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the visual intensity of the degradation of the video sequences obtained is determined by the quantity of modified wavelet coefficients in each spatial-temporal subband.

8. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the intensity of the visual degradation of the video sequences decoded from the modified main stream is a function of the position in the original digital stream of the modified data, which data represents, according to its positions, the values quantified according to different precisions [accuracies] of the wavelet coefficients belonging to a spatial-temporal subband.

9. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the intensity of the visual degradation of the video sequences decoded from the modified main stream is determined according to which quality layer of the modified wavelet coefficients they belong to in each spatial-temporal subband.

10. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the modification of the wavelet coefficients is carried out directly in the binary stream.

11. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the modification of the wavelet coefficients is carried out with a partial decoding.

12. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the modification of the wavelet coefficients is carried out during the coding or by carrying out a decoding then a complete re-encoding.

13. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the size of the modified main stream is strictly identical to the size of the original digital video stream.

14. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the substitution of the wavelet coefficients is carried out with random or calculated values.

15. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the duration of the visual scrambling obtained in a group of frames is determined as a function of the temporal subband to which the modified wavelet coefficients belong.

16. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the visual scrambling obtained in a group of frames is limited spatially in a region of interest of each frame.

17. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the complementary information is organized in layers of temporal and/or spatial and/or qualitative and/or transmission rate scalability and/or scalability by region of interest.

18. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the stream is progressively descrambled with different levels of quality and/or resolution and/or frame rate and/or according to a region of interest via the sending of a part of the complementary information corresponding to the layers of qualitative and/or spatial and/or temporal scalability and/or scalability for a region of interest.

19. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the stream is partially descrambled according to different levels of quality and/or resolution and/or frame rate and/or according to a region of interest via the sending of a part of the complementary information corresponding to the layer or layers of qualitative and/or spatial and/or temporal scalability and/or scalability for this region of interest.

20. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that a synthesis of a digital stream in the original format is calculated in the addressed equipment as a function of this modified main stream and of this complementary information.

21. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the transmission of this modified main stream is realized via a physically distributed material support (CD-ROM, DVD, hard disk, flash memory card).

22. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the modified main stream undergoes operations of transcoding, of rearrangement and/or of the extraction of frames or of groups of frames during its transmission.

23. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the transmission of this complementary information is realized via a physically distributed support material (flash memory card, smart card).

24. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the modification of the wavelet coefficients is perfectly reversible (lossless process) and that the digital stream reconstituted from the modified main stream and from the complementary information is strictly identical to the original stream.

25. The process for the secured distribution of video sequences according to one of the previous claims, characterized in that the modification of the wavelet coefficients is perfectly reversible (lossless process) and that the portion of the digital stream reconstituted from the modified main stream and from the complementary information is strictly identical to the corresponding portion in the original stream.

26. The process for the secured distribution of video sequences according to Claim 24 or 25, characterized in that the reconstitution of a descrambled video stream is controlled and/or limited in terms of predefined frame rate and/or resolution and/or transmission rate and/or quality as a function of the rights of the user.

27. The process for the secured distribution of video sequences according to Claim 24 or 25, characterized in that the reconstitution of a descrambled video stream is controlled and/or limited in terms of predefined frame rate and/or resolution and/or transmission rate and/or quality as a function of the viewing apparatus on which it is visualized.

28. The process for the secured distribution of video sequences according to one of Claims 24, 25, 26 or 27, characterized in that the reconstitution the descrambled video stream is carried out in a progressive manner in stages until the reconstitution of the original video stream.

29. A system for the fabrication of a video stream for realizing the process according to one of the previous claims, comprising at least one multimedia server containing the original video sequences and characterized in that it comprises a device for analyzing the video stream, a device for separating the original video stream into a modified main stream by deletion and replacement of certain information coding the original visual signal and into complementary information as a function of this analysis, and at least one device in the addressed equipment for the reconstruction of the video stream as a function of this modified main stream and of this complementary information.